

That Which is Claimed is:

1. A multi-line telephone system interface assembly, comprising:

a local telephone company demarcation point, the demarcation point device including a
5 first connector that provides a plurality of connection sites, each of which delivers
telecommunication signals corresponding to a respective telephone line;

a multi-line telephone system configured to provide a plurality of telephone lines to users,
the telephone system including a second connector with a plurality of connection sites, the
second connector being configured to mate with the first connector such that each of the
10 connection sites of the first connector can be connected with a respective connection site of the
second connector to provide a corresponding telephone line to a user; and

a test unit connected between the first and second connectors, the test unit having a
demarcation point connector that interfaces with the first connector and a telephone system
connector that interfaces with the second connector, the test unit including a plurality of
15 switches, a respective one the switches being configured to selectively connect a respective pair
of connection sites of the first and second connectors to provide a telephone line therebetween,
the test unit further comprising an indicator that signals whether a designated connection site of
the first connector is providing telecommunication signals to its corresponding telephone line.

20 2. The system interface assembly defined in Claim 1, wherein the first and second
connectors are amphenol connectors.

3. The system interface assembly defined in Claim 1, wherein the indicator
comprises an RJ-type port.

25 4. The system interface assembly defined in Claim 3, further comprising a telephone
handset connected with the RJ-type port.

5. The system interface assembly defined in Claim 1, wherein the indicator
30 comprises an audio speaker.

6. The system interface assembly defined in Claim 1, wherein the demarcation point device comprises an RJ21X demarcation point device.

5 7. The system interface assembly defined in Claim 1, wherein the test unit includes an LED corresponding to each switch to indicate whether the telephone line corresponding to that switch is in operation.

8. The system interface assembly defined in Claim 1, wherein the demarcation point
10 connector and the telephone system connector are complementary.

9. The system interface assembly defined in Claim 1, wherein the plurality of connection sites of the first connector is twenty-five connection sites.

15 10. A multi-line telephone system interface assembly, comprising:
a local telephone company demarcation point, the demarcation point device including a first connector that provides a plurality of connection sites, each of which delivers telecommunication signals corresponding to a respective telephone line;
a telephone system configured to provide a plurality of telephone lines to users, the
20 telephone system including a second connector with a plurality of connection sites, the second connector being configured to mate with the first connector such that each of the connection sites of the first connector can be connected with a respective connection site of the second connector to provide a corresponding telephone line to a user; and
a test unit connected between the first and second connectors, the test unit having a
25 demarcation point connector that interfaces with the first connector and a telephone system connector that interfaces with the second connector, the test unit including a plurality of switches, a respective one of the switches being configured to selectively connect a respective pair of connection sites of the first and second connectors to provide a telephone line therebetween, the test unit further comprising means for determining whether a connection site
30 of the first connector is providing a dial tone to its respective telephone line.

11. The system interface assembly defined in Claim 10, wherein the first and second connectors are amphenol connectors.
- 5 12. The system interface assembly defined in Claim 10, wherein the means for determining comprises an RJ-type port.
13. The system interface assembly defined in Claim 12, further comprising a telephone connected with the RJ-type port.
- 10 14. The system interface assembly defined in Claim 10, wherein the means for determining comprises an audio speaker.
- 15 15. The system interface assembly defined in Claim 10, wherein the demarcation point device comprises an RJ21X demarcation device.
16. The system interface assembly defined in Claim 10, wherein the test unit further comprises an LED corresponding to each switch to indicate whether the corresponding telephone line is in operation.
- 20 17. The system interface assembly defined in Claim 10, wherein the demarcation point connector and the telephone system connector are complementary.
- 25 18. The system interface assembly defined in Claim 10, wherein the plurality of connection sites of the first connector is twenty-five connection sites.
19. A test unit for determining whether a local telephone company demarcation point device is providing telecommunication signals to one of a plurality of telephone lines of a telephone system, the test unit comprising:

a demarcation point connector that is configured to interface with a connector of the demarcation point;

a telephone system connector that is configured to interface with a connector of the telephone system;

5 a plurality of switches, a respective one of the switches being configured to selectively connect a connection site of the demarcation point device with a corresponding connection site of the telephone system, the selective connection providing a telephone line therebetween; and

an indicator that is configured to signal whether a designated connection site of the demarcation point device is providing telecommunication signals to its respective telephone line.

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20. The test unit defined in Claim 19, wherein the demarcation and telephone system connectors are amphenol connectors.

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21. The test unit defined in Claim 19, wherein the indicator comprises an RJ-type port.

22. The test unit defined in Claim 21, further comprising a telephone connected with the RJ-type port.

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23. The test unit defined in Claim 19, wherein the indicator comprises an audio speaker.

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24. The test unit defined in Claim 19, wherein the test unit further comprises an LED corresponding to each switch to indicate whether the corresponding telephone line is in operation.

25. The test unit defined in Claim 19, wherein the demarcation point connector and the telephone system connector are complementary.

26. The test unit defined in Claim 19, wherein the plurality of switches is twenty-five switches.

27. A test unit for determining whether a local telephone company demarcation point device is providing telecommunication signals to one of a plurality of telephone lines of a telephone system, the test unit comprising:

a demarcation point connector that is configured to interface with a connector of the demarcation point;

a telephone system connector that is configured to interface with a connector of the telephone system;

a plurality of switches, each of the switches being configured to selectively connect a connection site of the demarcation point device with a corresponding connection site of the telephone system, the selective connection providing a telephone line therebetween; and

means for determining whether a specified connection site of the demarcation point device is providing a dial tone to its respective telephone line.

28. The test unit defined in Claim 27, wherein the demarcation point and telephone system connectors are amphenol connectors.

29. The test unit defined in Claim 27, wherein the means for determining comprises an RJ-type port.

30. The test unit defined in Claim 29, further comprising a telephone handset connected with the RJ-type port.

31. The test unit defined in Claim 27, wherein the means for determining comprises an audio speaker.

32. The test unit defined in Claim 27, wherein the test unit further comprises an LED corresponding to each switch to determine whether the corresponding telephone line is in operation.

5 33. The test unit defined in Claim 27, wherein the demarcation point connector and the telephone system connector are complementary.

34. The test unit defined in Claim 27, wherein the plurality of switches is twenty-five switches.

10 35. A method of testing a telephone line for operability, comprising the steps of:
connecting a local telephone company demarcation point and a multi-line telephone system with a test unit, the demarcation point device including a first connector that provides a plurality of connection sites, each of which delivers telecommunication signals corresponding to a respective telephone line, the multi-line telephone system configured to provide a plurality of telephone lines to users, the telephone system including a second connector with a plurality of connection sites, the second connector being configured to mate with the first connector such that each of the connection sites of the first connector can be connected with a respective connection site of the second connector to provide a corresponding telephone line to a user; the
15 test unit connected between the first and second connectors, the test unit having a demarcation point connector that interfaces with the first connector and a telephone system connector that interfaces with the second connector, the test unit including a plurality of switches, a respective one the switches being configured to selectively connect a respective pair of connection sites of the first and second connectors to provide a telephone line therebetween, the test unit further
20 comprising an indicator that signals whether a designated connection site of the first connector is providing telecommunication signals to its corresponding telephone line;

activating one of the switches to divert a telecommunication signal from one of the telephone lines to the indicator; and

monitoring the indicator to determine whether the telecommunication signal is reaching
30 the indicator.

36. The method defined in Claim 35, wherein the demarcation and telephone system connectors are amphenol connectors.

37. The method defined in Claim 35, wherein the indicator comprises an RJ-type port.

38. The method defined in Claim 37, further comprising a telephone connected with the RJ-type port.

39. The method defined in Claim 35, wherein the indicator comprises an audio speaker.

40. The method defined in Claim 35, wherein the test unit further comprises an LED corresponding to each switch to indicate whether the corresponding telephone line is in operation.

41. The method defined in Claim 35, wherein the demarcation point connector and the telephone system connector are complementary.

42. The method defined in Claim 35, wherein the plurality of switches is twenty-five switches.